

Overcoming the nursing workforce crisis in Europe to improve care for people with non-communicable diseases

About this think piece

This think piece frames the current nursing workforce crisis in the context of the increasingly significant non-communicable disease (NCD) challenges in Europe. The authors make a series of high-level recommendations on how policymakers can address the nursing workforce crisis and improve NCD care.

The findings and recommendations were developed based on a European-level literature review and interviews with leading experts, all of whom are members of European nursing organisations.

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Executive summary

Europe's health systems are in the midst of a nursing workforce crisis. Poor working conditions, low pay, high workloads and lack of career opportunities are impacting the wellbeing and satisfaction of nurses across Europe. The COVID-19 pandemic exacerbated these challenges, leading nurses to quit or consider quitting in unprecedented numbers.

At the same time, Europe is facing a rapidly increasing burden of non-communicable diseases (NCDs). NCDs such as cardiovascular disease, chronic respiratory disease,

diabetes and cancer are already the leading cause of death in Europe and are responsible for some of the highest levels of health expenditure. This challenge is set to intensify as Europe's population ages, leading to higher numbers of people with multiple NCDs who will require increasingly complex care.

NCDs are known to be the **leading cause** of death in Europe, responsible for some of the highest levels

of health expenditure

To address the double crisis of increasing NCDs and an insufficient nursing workforce, policymakers need to make systemic changes that put the wellbeing of nurses at their centre. The changes needed to tackle the two crises include improving pay and working conditions, providing opportunities for skill enhancement and professional recognition, empowering nurses in the delivery of care, and harnessing the power of

Policymakers need to make systemic changes that prioritise nurse wellbeing

technology to better support nurses. However, a piecemeal approach is not enough to address the chronic issues affecting the nursing workforce. To enact true change, these recommendations need to be implemented as part of a wellbeing framework.

Addressing nurses' needs must be seen as a high priority to ensure the sustainability of our health systems. Nurses are central to the delivery of high-quality care for NCDs, including, for example, through their role in prevention and early diagnosis services and their contribution to ensuring continuity of care between community and hospital settings. Nurses are at the heart of the patient-centric integrated healthcare of tomorrow, which will be needed to ensure that health systems can deliver effective and high-quality care to all people with NCDs.

Non-communicable diseases and the crisis facing Europe's nursing workforce

Non-communicable diseases (NCDs) place an enormous and growing burden on health systems and societies in Europe. In 2019, approximately 90% of all deaths in Europe were due to NCDs,¹ with cardiovascular diseases, cancer and neurological disorders being the three most common causes.²³ The number of deaths due to NCDs is set to increase as Europe's population ages, with evidence indicating that by 2080, older people could represent up to 29% of the total population.⁴ This is, in turn, likely to increase the already high cost of managing NCDs. In fact, evidence indicates that just four NCDs – cardiovascular disease, cancer, chronic respiratory disease and diabetes



The nursing workforce crisis and the increasing burden of NCDs are two major overlapping problems for European health systems.

Thus solutions to each should keep the other one in mind.

Elizabeth Adams

European Federation of Nurses Associations are responsible for approximately 25% of national health spending and a 2% loss of gross domestic product in the European Union (EU)
 Member States.⁵

The insufficient number of nurses in Europe is leading to a crisis that threatens the delivery of NCD care and, ultimately, NCD health outcomes. As with the rest of the world, Europe is currently seeing a nurse shortage that is putting a significant strain on the delivery of healthcare. An insufficient number of nurses per patient population could translate into worse health outcomes, higher healthcare costs and a decreased level of job satisfaction for nurses themselves.

A 'ticking time bomb'

Europe is facing potentially devastating shortages of nurses, which could threaten the ability of health systems to deliver safe and effective care. The World Health Organization (WHO) characterises current gaps in the health and care workforce in Europe as a 'ticking time bomb' that could lead to worsening health outcomes and, in extreme cases, system collapse. Although countries in Western and Northern Europe are generally faring better than the rest of the region, they are still struggling with nurse shortages. In England, for example, the National Health Service (NHS) reported more than 43,000 vacancies for

nurses in December 2022, equating to over 10% of its nursing workforce.¹¹ In Ireland, 85% of nurses and midwives surveyed by the Irish Nurses and Midwives Organisation in early 2023 stated that existing staffing levels do not meet required clinical and patient demand. Additionally, 66% felt that patient safety is at risk.¹² It is difficult to assess the true extent of nurse vacancies, though, as the majority of countries have very limited data on vacancies, attrition or retention.¹⁰

The COVID-19 pandemic exacerbated existing challenges in the retention of nurses. Various factors, including poor working conditions, low pay and high workloads, meant that nurse



It is essential that healthcare management and leadership understand the real scale of the nursing workforce problem and the reasons why so many nurses are leaving, so they can understand how to hold on to staff.

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retention was already an issue in some countries. However, the pandemic created new challenges, including problems accessing personal protective equipment (PPE), vaccines, adequate training and wellbeing support.^{13 14} In addition, nurses were required to work in excess of their normal working hours, often outside of their area of expertise.¹⁵ The compounded effect of pre-pandemic and pandemic working conditions resulted in an increased number of nurses leaving or wishing to leave the profession.¹⁶⁻¹⁹

Although the international recruitment of nurses is widely practised, it is not a sustainable solution to the nursing workforce crisis. International recruitment, outside of a country's domestic workforce, has been used as the primary short-term solution to nurse shortages, especially in Germany, Spain and the UK.¹⁰ But this approach leads to staff shortages in origin countries¹⁰ and can have negative effects on migrant nurses, such as de-skilling and the loss of time and finances due to the need to requalify in the destination country.²⁰

The reasons for the current nursing crisis in Europe are complicated and multifaceted.

Increased workload and burnout

Nurses have been facing high levels of stress and burnout for many years, resulting in physical exhaustion and psychological stress. Even before the COVID-19 pandemic, evidence showed that high workload, low staffing levels, long work shifts and low control over the job were factors associated with burnout among nurses.²¹ A 2020 UK review of working conditions for nurses found that compared with nurses working in the private sector, public sector nurses had high levels of stress, high pressure from staff shortages and double the number of sickness days.²² In a 2023 survey of nurses and midwives in Ireland, 67% reported always or very often feeling physically exhausted, and a staggering



It can feel overwhelming to be a nurse these days. It is such an increasingly demanding profession, both physically and psychologically. Yet it feels like decision-makers sometimes forget this.

Elizabeth Adams

European Federation of Nurses Associations 94% felt that their work had a negative psychological impact on their wellbeing.¹²

These challenges were felt even more acutely during the COVID-19 pandemic, leading to extreme levels of burnout and ultimately resulting in many more nurses in Europe leaving the profession. During the height of the pandemic, many nurses faced extremely heavy workloads, alongside additional risks to their physical and mental health.¹⁰ Surveys of European nurses at the time revealed high levels of stress, burnout, chronic fatigue and even post-traumatic stress disorder.^{16-18 23 24}

In addition, nurses reported feeling demotivated and perceiving a lack of respect for their profession.^{13 18 19} These challenges contributed to 20–61% of nurses in various European countries stating that they were considering quitting their jobs or leaving the nursing profession altogether.¹⁶⁻¹⁸

Low pay

Low pay in some countries puts a strain on nurses and contributes to poor retention.

Overall, nurses' pay in the EU has increased in real terms for the past 10 years and is, on average, just above the average wage of all workers. However, in some countries – such as Finland, France, Latvia and Lithuania – nurses' salaries are below the national average.²⁵ There are also wide differences across Europe, with remuneration levels in some western countries being up to three times higher than in eastern countries.²⁵ In England, a public sector pay cap in operation between 2010 and 2017 resulted in a 5% decrease in nurses' wages in real terms.²⁶ In addition, nurses' earnings in England are lower than in comparable Organisation for Economic Cooperation and Development (OECD) countries, such as Australia, Canada, New Zealand and the US.²⁶

Unsafe working conditions

Nurses often work in conditions that put their health and safety at risk. The European Federation of Nurses Associations (EFN) reported in 2021 that in Denmark, Portugal and the UK, almost 30% of nurses had been sexually harassed.²⁷ The perpetrators were not limited to patients or their relatives²² but also included other healthcare professionals.²⁷ In addition, certain aspects of the nursing working environment, such as heavy physical work and strenuous postures, can cause or contribute to physical disability.^{28 29}

The COVID-19 pandemic created even greater risks to nurses' health and wellbeing. Although recent data are not yet available, it is thought that by October 2020, 1,500 nurses had died globally due to COVID-19. This is more than the number of nurses who died during the First World War.³⁰ Many healthcare professionals faced a shortage of supplies and resources, including PPE, with some being persecuted for raising safety concerns.³¹³² They also had to contend with a global increase of as much as 58% in violent attacks, which ranged from coercion and threats to robbery and material damage.³³



Nurses are not paid well for what they do for patients. So they say, 'Why should we stay in a profession that is underpaid, where we have been physically abused and where we deal with all these healthcare issues that threaten our life?'

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Gender inequality and discrimination

Gender inequality and structural racism persist in European healthcare and contribute to the nursing workforce crisis. The health sector in Europe has a gender pay gap of 20%. This is significantly higher than the average, which is 12%. Specific data on the gender pay gap for nursing, where women represent the majority of the workforce, are generally



There is a gender bias in policies and measures affecting nurses. Although nurses' needs are critical, they do not receive the same level of attention as more traditionally male-dominated professions.

Wolfgang Kuttner

European Federation of Nurses Associations and Austrian Nurses Association lacking, but research has shown that an increase in the proportion of women in a health profession is associated with a decrease in wages in that sector.³⁴ In addition, women in the healthcare sector – and particularly in nursing – encounter other inequalities, such as difficulties in balancing childcare and work responsibilities, higher health risks, and a lack of visibility of female leaders.¹⁰ Structural racism has also been reported at various levels of care in nursing, resulting in issues such as disproportionate referrals to disciplinary procedures for Black staff and those from minority ethnic backgrounds, and even poorer access to PPE for these individuals.¹⁹

Limited opportunities for training or career development

Training and career progression opportunities are often insufficient for nurses.

Population health needs are changing due to technological innovations, an evolving burden of disease and new organisational developments.¹⁰ This means that nurses require new technical skills, such as using digital and artificial intelligence tools, alongside soft skills that include person-centred communication, interprofessional teamwork and sociocultural sensitivity.^{10 35} Continuing professional development (CPD) has an important role in providing the training required for nurses, but it is not always available. While some countries, such as France, Hungary, Italy and the UK, make CPD mandatory for nurses by linking it to licensing and revalidation, many others do not.^{10 19} Yet even when CPD is mandatory for revalidation, nurse surveys reveal an overall perceived lack of opportunity to access training and achieve career progression.¹⁹



Nurses do not feel valued. They would say: 'I, as an individual, don't feel like this is the best place for me. I don't feel that I am being recognised for my efforts in terms of what I'm getting out of it — whether that's in terms of pay, safety, career development or peer support.'

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Nurses are essential to addressing current challenges in delivering NCD care

While the nursing workforce crisis is unfolding, NCD care is facing challenges of its own. The increasing burden of NCDs, coupled with the negative impact of the pandemic, presents a series of challenges for NCD care. These include clearing backlogs, improving NCD prevention and optimising early diagnosis and continuity of care. In addition, certain areas, such as mental health, disability and community care, require renewed focus. As nurses are essential to overcoming these challenges, the nursing workforce crisis leaves gaps that affect the critical dimensions of NCD care.

Clearing backlogs in screening for NCDs

The COVID-19 pandemic brought widespread disruption to the delivery of NCD care, leading to long waiting times and backlogs. In 2020 in Europe, the pandemic led to 10–20% fewer cancer-related surgeries and 5 million fewer MRI and CT diagnostics (a decrease of almost 7%) than in 2019.²⁵ The number of people being screened for cervical and breast cancers was an average of 6% lower in the first half of 2020 than in the same period the previous year.²⁵ Cumulatively, this led to backlogs in all countries for all of these services, with accompanying longer waiting times for patients. For cancer, the OECD estimates that the disruption to early diagnosis means more people with cancer will be diagnosed at later stages and be at risk of worse outcomes as a result.²⁵ Nurses are key to all these services affected by backlogs. They can play a central part in cancer screenings, such as by conducting procedures and promoting health awareness.

Measures to reduce backlogs need to be planned carefully so that they do not contribute to burnout among nurses and ultimately lead to further resignations.

Policymakers have implemented a range of actions to reduce COVID-19-related backlogs and waiting times. These include changes that aim to increase productivity by raising the number of hours nurses are required to work through overtime.²⁵ However, this could increase the rate of burnout and, as a result, the frequency of resignations.²⁵

Improving NCD prevention

Nurses have an essential role in the prevention of NCDs. A primary approach to preventing and managing NCDs is to target modifiable behavioural risk factors, such as tobacco smoking, salt intake and alcohol use, as well as metabolic risk factors, such as blood pressure and obesity.³⁶ With adequate funding, staffing and organisational support, public health nurses can help drive the shift to a focus on health promotion and NCD prevention, ultimately reducing ill health and saving lives. A 2022 global systematic review showed that educational interventions delivered by nurses were 76% effective in leading to healthier lifestyles and improving NCD outcomes.³⁷

Improving continuity of care

Continuity of care is vital for people with NCDs and often depends on nurses. Good continuity of care between healthcare professionals across different parts of the health system – for example, between hospital and primary care settings – helps reduce mortality rates, the risk of complications and healthcare expenses.³⁸ Evidence shows that the majority of interventions designed to ensure continuity of care for chronic conditions depend on nurses, especially those with advanced competencies.³⁹

Addressing pressing shortages in certain services, including mental health

Nurse shortages are affecting the ability of health systems to deliver effective mental health, disability and community care. In 2020, the number of nurses working across these three service areas in the UK was lower than it was in 2010, with 25% of all nurse vacancies being in mental health care.⁴⁰

Although the majority of countries around the world report shortages in the mental health nursing workforce, the lack of high-quality workforce data makes projecting and planning very difficult.⁴¹ For community care, which is still at the early stages of development in Austria, Romania and other countries, it seems safe to assume that the need for community nurses will increase greatly in the near future.⁴² Meanwhile, disability care, including work in nursing homes, has a shortage of skilled nurses due to disenchantment with the low pay and demanding physical and psychological work.⁴³



There isn't any sort of overarching legal requirement or accountability for the provision of workforce i.e. making sure that there's a sufficient number of people to staff those services safely and effectively.

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Opportunities to address the nursing workforce crisis and improve NCD care

Successfully addressing the nursing workforce crisis can translate into better overall

NCD care. A better working situation for nurses and higher rates of recruitment and retention would translate into higher-quality NCD care. Increases in pay, career prospects, training opportunities and empowerment would help improve the wellbeing of nurses, as would using technology to facilitate efficiency and reduce the workload.

Nurse wellbeing is a multifaceted issue, and improving it requires system-wide changes.

The causes of the nursing workforce crisis are complex. While interventions targeting fair pay, safety at work, gender/race discrimination or better career progression are important on their own, multidimensional systemic changes have a better chance of bringing about well-rounded and lasting change (*Case study 1*).⁴⁴

Case study 1. Magnet hospitals: supporting the wellbeing of nurses

In the 1980s, hospitals in the US faced high rates of turnover and early retirement among nurses. The Magnet model successfully addressed these issues by creating a more positive work environment, which involved providing more resources and empowering nurses. It achieved the latter by creating decentralised organisational structures and involving nurses in decision-making, which led to improved working relationships with doctors. The model resulted in lower rates of burnout and higher rates of job satisfaction and retention, as well as better patient outcomes. 44

In 2020, researchers began a study to assess the feasibility of an organisational redesign of the Magnet model for Europe. 46 The project includes 60 hospitals in six countries (Belgium, England, Germany, Ireland, Norway and Sweden) and will implement the five Magnet principles:

- structural empowerment of clinical staff
- · transformational leadership
- · exemplary and evidence-based professional practice
- new knowledge, innovations and improvements
- empirical outcomes.

Throughout the study, regular survey feedback will be sought on the wellbeing of healthcare personnel, including nurses.

Elements to consider as part of a comprehensive framework for nurses' wellbeing:





Nurses' wellbeing is rarely seen as a key issue to be addressed systemically and holistically. Difficulties with attracting and retaining nurses go back decades and are increasingly complex. Yet proposed solutions have often addressed dimensions of wellbeing in isolation and in the short term. To see real change, wellbeing needs to be addressed as the complex issue it is.

Elizabeth Adams

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Award nurses fair and appropriate compensation

Nurses' pay should reflect their high level of education, be relatively equitable across geographical regions and account for inflation. The European Directive on Mutual Recognition of Professional Qualifications and the Bologna Process require governments to reform higher education to create more consistency between countries. ^{47 48} In many countries, this has led to the need for anyone who wants to work as a nurse to gain qualifications such as a bachelor's or master's degree, depending on their role. This increasing professionalisation should be accompanied by pay increases for nurses. In the UK, experts have recommended updating the current pay system to better recognise skills and experience and to provide superior career pathways for people with advanced qualifications. ²⁶ It is also important to ensure that pay levels are fair in light of inflation. ²⁶

Support nurses' mental health

The mental health of nurses must be prioritised. Nursing is a demanding occupation with multiple stressors that can negatively impact the mental health of those who undertake it. These factors are even more significant in conditions of extreme prolonged stress, such as the COVID-19 pandemic. It should not come as a surprise, therefore, that the mental health of nurses throughout Europe plummeted during this time. 16-18 23 24 A systematic review of randomised controlled trials shows that mindfulness and cognitive behavioural therapy are particularly useful in reducing stress, anxiety and depression for medical personnel. However, as the authors point out, such interventions to tackle mental health should be accompanied by system-based changes ensuring, among other things, suitable staffing levels and better working hours. 49 Overall, better data are urgently needed on the efficacy of various personal and systemic interventions for improving mental health. 49

Ensure access to flexible working conditions

Flexible working conditions for nurses should be a right embedded in medical employment law. Flexible working conditions are an integral part of a good work–life balance. Flexibility in working hours, the effective division of tasks, part-time contracts and parental leave are already used throughout Europe to increase wellbeing and reduce gender inequalities among medical personnel.¹⁰ It has been argued that costs incurred during the implementation of flexible working conditions are offset by reduced absenteeism and increased recruitment and retention.¹⁹ Differences in how these measures are executed exist among European countries. For example, while nurses in the UK have the right to request flexible working conditions,¹⁹ in the EU, these are limited to people with parental or carer responsibilities.⁵⁰

Set up accessible paths for professional recognition

Advanced practice nurses (APNs) can improve the quality of care. For nurses looking to increase their skills and levels of responsibility, APN roles can present an attractive opportunity to do so. Among the most common types of APNs are nurse prescribers (*Case study 2*). Having nurses practising at this higher level can help address the lack of doctors that is a challenge in some areas, and it can ultimately strengthen the delivery of primary care services. However, as of 2019, only 13 countries in Europe allowed nurses to prescribe medicines. Furthermore, there is wide variation in the educational requirements for nurse prescribers and the types of medicines that they can prescribe. Another type of APN is the clinical nurse specialist, who will have a high degree of specialisation attained through a master's degree or PhD programme. The presence of clinical nurse specialists in healthcare settings has been associated with an improvement in quality of care and a reduction in medication errors. It has also had a positive effect on the retention and recruitment of nurses.

So far, not all European regulatory and governmental bodies recognise the APN role.

Despite the benefits that APNs offer, European countries have not yet reached a consensus on how to define advanced practice nursing, and not all countries recognise the APN role.⁵⁴ In 2022, the EFN urged EU policymakers to support Member States' progression of advanced practice nursing in Europe and recommended exploring the potential of a European framework for advanced practice nursing to help guide the policy processes.⁵⁵ Harmonising professional recognition should be a priority to address inequalities in the provision of care throughout Europe.

Case study 2. Nurse prescribing in Poland

In 2016, new legislation in Poland allowed authorised nurses to prescribe medicines (except for very potent or controlled medications), issue referrals for certain diagnostic tests and prepare orders and prescriptions for medical devices. ⁵⁶ The legislation was introduced to help improve medication management and the overall efficiency of the health system by reducing interruptions and duplications in treatment. ⁵⁷ The nurse's title – either independent or supplementary prescriber – depends on their level of education. Nurses with a master's degree are recognised as independent prescribers. ⁵⁶ Although research shows that many nurses were initially unsure whether they were prepared for this new role, the number of prescriptions they provided increased by five times in two years. ⁵⁶ Most prescriptions were issued for NCD medications, wound dressings and breast-milk substitutes. ⁵⁷

Despite some nurses outlining an increase in workload and less time to care for patients directly, there were also reports of increased autonomy and greater work satisfaction.⁵⁶

The increase in work satisfaction is in line with other research that supports granting nurses prescriptive authority. Researchers found that the measures they investigated in other countries led to improvements both in access to medicines in primary care and in the continuity of care.⁵⁷ Increases in the quality of patient-centred care can help nurses honour their commitment to their patients and make a real difference by improving safety, quality of care and the health service.

Enhance skills and expertise among nurses

Upskilling and reskilling are necessary to ensure that nurses are equipped to deal with the challenges of health systems in the 21st century. The skills required include digital and IT skills, soft skills – such as communication, which is increasingly important for personcentred care – and 'green skills' to support climate-neutral care. Education models could also benefit from replacing large-group teaching with small interprofessional groups and the use of e-learning tools. Admittedly, this shift would require additional funding, which is not always available.

The 2020 European Skills Agenda and the designation of 2023 as the European Year of Skills have introduced new opportunities for skills investment for nurses. The 2020 European Skills Agenda, designed to be achieved by 2025, aims both to ensure that people have the right skills for their jobs and to increase participation in lifelong learning pathways. In support of this, the European Parliament and Member States agreed to designate 2023 as the European Year of Skills. The initiative has four main objectives: promoting investment in training and upskilling; delivering skills that employers need; placing an emphasis on green and digital transition and economic recovery; and attracting people from outside the EU to fill skill gaps. As the EFN said in a recent policy statement, these initiatives are a great opportunity for employers to increase access to upskilling and reskilling for nurses and to address staff shortages by investing in education. However, it is important to note that simply creating training opportunities is not enough; employers should ensure that nurses can take advantage of them.

Empower nurses

Giving nurses a voice can lead to improved care and better management practices. Satisfaction with the nursing profession, improved working conditions, better patient outcomes and higher patient satisfaction are linked to good management practices and nurse empowerment (*Case study 3*).^{10 46 51 61} Powerful nurse associations can be key stakeholders in influencing political decision-making and securing better working conditions for nurses.⁶²⁻⁶⁴

Case study 3. Nurse-led care in the Buurtzorg model

In the 1990s, the Netherlands introduced a reform to improve public service management and reduce costs. However, the reform had the opposite effect: after 10 years, costs doubled and the quality of the services fell. For healthcare, that meant severe fragmentation of care, low patient satisfaction and such a high level of dissatisfaction among nurses that many quit the profession.⁶¹

In 2007, a nurse-led initiative set out to provide a community care alternative to traditional management models. Four nurses set up a social enterprise named Buurtzorg ('neighbourhood care'). Under this initiative, local teams of nurses were responsible for managing care standards, encouraging teamwork and directing the use of resources. The teams operated in a flat hierarchy, distributing responsibilities using a rota system. They aimed to provide holistic care centred around patient needs while focusing on building a personal relationship with their patients ('first coffee, then care').⁶¹

After 10 years, Buurtzorg had become the largest provider of community health services in the country, with more than 900 teams, each consisting of up to 12 nurses and nurse assistants. It obtained top marks in all categories following the inspection of the Care Quality Commission, was named Dutch Employer of the Year five times and had the best patient satisfaction rates of any healthcare organisation in the Netherlands.⁶¹

Use technology to improve efficiency and reduce the workload

Digital tools could support nurses in managing

NCDs. Tools such as smartphone health applications could help improve the continuity of care by reducing the number of consultations and allowing healthcare personnel to monitor individuals' health conditions in real time.

Technology can also provide new tools to improve the delivery of patient-centred care.

The development of digital tools in health is progressing quickly. For instance, in 2020, there were more than 100 commercially available apps for people with heart failure. Evidence shows that digital tools can improve communication between patients and care providers, supporting symptom management and



It is important to have strong nurse associations that are politically active. It is important to have a say in what's best for the patients, for the nurses and for the system. It is important to have our voices heard.

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having a beneficial effect on quality of life.⁶⁶ These tools could also improve efficiency for nurses – for example, by allowing them to complete tasks more quickly and to offer virtual appointments that do not require travelling time to visit patients (*Case study 4*). Some digital tools could also allow nurses to expand the range of tasks they can deliver, including by taking over tasks that were previously the responsibility of doctors.^{67 68}

Case study 4. Digital platforms for integrated care: the CareWell model

Older people with multiple health conditions have complex care needs, which can be due to limited mobility, a low health status and an increased risk of death.⁷¹ They often have more medical consultations than people with only one health condition and face higher risks of hospitalisation. Meanwhile, the care they receive may be fragmented, resulting in increased costs to health systems.⁷²

To address these issues, a programme was set up in 2015 and piloted in six European regions: Basque Country (Spain), Lower Silesia (Poland), Powys (Wales), Puglia (Italy), Veneto (Italy) and Zagreb (Croatia). It aimed to use digital platforms to improve the coordination of care and communication between care providers while supporting patient empowerment and the delivery of home-based care.⁷³

The project led to a reduced number of visits to emergency departments and an increased use of primary care. In addition, patients reported increasingly higher levels of satisfaction as the project progressed.⁷³

The implications for nurses, although not assessed in this project, could be mixed. While the shift from emergency department visits to primary care would mean a decreased workload for nurses working in emergency departments, it could increase the workload for primary care nurses. However, more efficient information-gathering and monitoring of patients could, in theory, reduce the workload burden across all healthcare settings.

The way digital tools are introduced and used is important to ensure that they support, rather than hinder, nurses. In some cases, nurses find that digital tools increase their workload as they need to maintain both digital and paper-based systems. ⁶⁷ In addition, employers will need to recognise that not all nurses have the same digital literacy and capability skills. ⁶⁹ At a system level, new tools can sometimes be incompatible with existing digital systems, leading to potential usability issues. ⁶⁷ It is thus essential for providers to be aware that digital tools may only reach their full potential if they are designed with the end users – often nurses – in mind. To this end, the EFN underlines the importance of cocreating IT solutions with nursing associations in the context of proposed new regulations for the European Health Data Space. ⁷⁰

Improving NCD care by investing in nurses

Nurses fulfil an essential role in the healthcare ecosystem, which includes delivering vital care for people with NCDs. As the burden of NCDs in Europe is increasing, health systems require a sufficient number of nurses to deliver care. Yet a number of challenges, including high workloads, low pay and limited opportunities to progress, have led many nurses to feel undervalued – a situation that has only become exacerbated by the additional pressure of managing the COVID-19 pandemic. It should not come as a surprise to anyone that nurses are leaving the profession in large numbers, with open positions remaining unfilled even in wealthier countries with relatively good working conditions.

Tackling the NCD burden requires addressing the nursing crisis in Europe. This is not as simple as just increasing the number of nurses or raising their pay. Although both measures are necessary, the landscape is more complex and requires a holistic approach that aims to create a supportive, safe and fair working environment. It is essential to take into account the wellbeing of nurses, provide opportunities for career development and empowerment, and harness technology to benefit rather than hinder nurses.

Tackling the nursing workforce crisis will require policymakers to take various priority actions to create a solid staff wellbeing framework that efficiently addresses chronic systemic problems and dissatisfaction.

Among the actions required to build such a framework are:

- Improve pay and working conditions. Pay needs to be fair, reflecting the value that
 nurses provide, the level of education they have received and their experience. Equally
 important, every effort should be taken to provide a safe and supportive working
 environment for nurses that strives to promote good mental health, and to ensure
 access to flexible working conditions where feasible.
- Ensure opportunities for professional advancement and recognition. APNs and other professional roles are vital in delivering high standards of care and improving the functioning of health systems. These roles should be harmonised across all countries in Europe and recognised by all regulatory and governmental bodies.
- Invest in skills development for nurses. Health systems need to invest in nurses' lifelong learning. The European Skills Agenda and the 2023 European Year of Skills provide significant opportunities, as well as funding that could be used to equip nurses with the skills they need, such as digital, IT, soft and green skills.
- **Empower nurses.** Nurses should be encouraged to take on leadership and management roles. These roles are linked with increased satisfaction for nurses and patients alike.
- Harness digital tools to support nursing in partnership with nurses. New technological tools developed with the end user in mind can help nurses better manage workloads. However, their deployment needs to be accompanied by the provision of appropriate training.

Embedding these principles in a staff wellbeing framework will be essential to ensure our health systems are equipped with a highly trained nursing workforce that can keep up with the demands of delivering NCD care in the 21st century. By investing in nurses, we invest in better healthcare for everyone.

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